UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

KIMBERLY Y. LAFAVE, *et al.*,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	**Case No. 1:23-cv-1605 (CMH/JFA)**
	)	
THE COUNTY OF FAIRFAX, VIRGINIA, and KEVIN DAVIS, in his Official Capacity as Chief of Police,	)	
	)	
Defendants.	)	

DECLARATION OF ALEXANDRA FILINDRA, Ph.D.

I, Alexandra Filindra, Ph.D., declare as follows:

BACKGROUND

1. Since 2017, I have served as an Associate Professor in the Department of Political Science at the University of Illinois Chicago.

2. I am Co-Principal of the firm Edgewater Research, LLC ("Edgewater), a public opinion consulting firm.

3. From 2012–2017, I served as an Assistant Professor in the Department of Political Science at the University of Illinois Chicago.

4. Over the course of my work with the University, I have served as Director of Graduate Studies (2015-2017); Partnering Scholar, Institute of Government and Public Affairs (2022-present); Affiliated faculty, Latin American and Latino Studies (2013-2023); Affiliated faculty, Department of Psychology, (2016-present); and as Faculty fellow, Honors Program, (2013-present).

5. During the years 2009-2012, I served as a Post-doctoral Research Associate at Brown University, RI, with the Center for the Study of Human Development (2011-2012), and, prior to that, with the Taubman Center for Public Policy & American Institutions (2009-2011).

6. I earned a Bachelor of Arts in Political Science with a Minor in Economics from Bryn Mawr College in Bryn Mawr, Pennsylvania, and a Ph.D. in Political Science from Rutgers University in New Brunswick, New Jersey (2009).[1]

7. As a scholar with more than ten years of industry experience and almost 15 years of academic experience, my work uses observational and experimental methods in the analysis of public opinion data, including studies of public opinion about gun policy.

8. I am aware of this lawsuit, have reviewed and generally familiarized myself with the claims and allegations in the Complaint ("Complaint"), including request for preliminary injunction, filed by the Plaintiffs LaFave, Taubman, and Holzhauer ("Plaintiffs") in this matter.

9. I am being compensated for services performed in the above-entitled case at an hourly rate of $175.00 for reviewing materials and preparing reports; and $200.00 per hour for depositions and court appearances. My compensation is not contingent on the results of my analysis or the substance of any testimony.

10. The testimony in this Declaration is based upon a combination of my professional training, research, and work experiences in my various academic roles; and, from personally

[1] For a full CV, including a comprehensive list of my Academic Publications, please see Exhibit 1 to this Declaration.

reviewing relevant documents, and analyzing survey results. Any information I obtained from those outside sources is consistent with my own understanding.

THE SURVEY

11. The County of Fairfax contracted with the Center for Survey Research ("CSR") at the University of Virginia ("UVA") to administer the Fairfax Community Survey 2022 ("Survey").

12. The purpose of the survey was to determine area residents' use and anticipated use of various types of Fairfax County public parks, and other public spaces, preferences related to firearms in these spaces, and perceptions of safety in these spaces.

Development, Design, Methodology.

13. Together with Dr. Noah J. Kaplan, I developed and drafted, and Fairfax County approved, the Survey, which included an experimental treatment design with a total of two treatment groups, and CSR was engaged separately by the County and relied upon to oversee and implement production, distribution, and data collection of the Survey.[2] [3]

14. For my work, I rely on CSR's collection of the Survey responses which were collected following a mixed-mode, mail-forward design of households in and around Fairfax County. More specifically, address-based sampling (ABS) was used to draw a simple random sample from households across the following cities/counties: Arlington County, Fairfax County,

[2] The survey also included checks for survey order effects, also meant as attention checks, so there are four versions of the Survey instrument in total.

[3] *See generally* Fitzgibbons Declaration, *passim.*

Loudoun County, Prince William County, and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. Selected households were contacted via a series of USPS mailings, including paper questionnaire packets, with a delayed web option and reminder phone calling to non-responding households. *See* Fitzgibbons Declaration, ¶¶12-14 & 19-21.I rely as well on CSR's distribution and allocation of the different versions of the Survey instrument, specifically CSR's randomized selection process utilized to determine who among the Survey participants received which version of the Survey instrument. CSR distributed the Survey across the randomly selected sample group, with one-half of all respondents (Groups 1-2) each receiving "a version of the questionnaire which asked about visiting parks and other outdoor spaces, in general," and the other half (Groups 3-4) each receiving "a version which asked respondents about visiting those same places "if people are allowed to carry guns in" these specific places. Allocation into one or the other treatment was done by random selection. *See id*. ¶¶15-16.

15. Additionally, I rely as well on CSR's formatting and means and manner of distribution of the Survey instrument, explained and accepted to have been conducted by CSR as follows:

> CSR formatted each of the four versions of the questionnaire for paper distribution and programmed the [Survey] instruments into Qualtrics, an online survey platform, for web administration. The corresponding version of the paper questionnaire was mailed to each household based on their assigned treatment group. If a participant elected to complete the survey online, their assigned unique sample ID prompted the appropriate web version of the instrument that matched their randomly assigned treatment group. The questionnaire

> was available in both English and Spanish, with CSR performing the Spanish translation of the [Survey] instrument and contact materials.[4]

See Fitzgibbons Declaration, ¶¶17-18.

16. The Survey launched on May 11, 2022, with the mailing of an advance letter to the ABS sample of 3,000 households. Data collection across all modes closed on September 13, 2022. The data collection followed a CSR-confidential protocol to facilitate targeted follow-up to non-respondents.

17. A total of 457 survey responses were collected.

18. *Margin of Error*. The margin of error for the unweighted sample is approximately +/- 4.6 percent at the 95 percent level of confidence. This means that if the Survey were repeated with 100 different random samples, the results of the Survey would be within 4.6 percentage points of the population mean in 95 out of those 100 iterations of the survey.[5] The data are weighted to reflect the demographic distribution of the relevant population.[6] As such, the results are representative of the opinions of the citizens of the area included in the Survey.

19. Together with Dr. Noah J. Kaplan,[7] whom I engaged to assist me in the development of the questionnaire, data coding, and analysis, I analyzed the Survey data and, in

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[4] A full copy of each of the four versions of the Survey questionnaire is presented at the end of the Study Report, included here as Exhibit 2.

[5] Respondents who answered "don't know/prefer not to say" or who did not fill out a question were excluded from the analysis for the specific question. Because of item non-response, the margin of error varies across questions (up to +/- 5.5 percent).

[6] The weighting approach used in this instance was determined and implemented by CRS. *See* Fitzgibbon Declaration, ¶¶38-43.

[7] Dr. Kaplan has a Ph.D. in Political Science from Columbia University and specializes in methodology, statistical analyses, and public opinion. He has decades of industry and academic experience in survey research and analysis, including studies of gun policy issues.

July 2023, produced a final "Study Report" through Edgewater, the public opinion consulting firm in which I am Co-Principal (the "Study Report").

20. What follows below is a restatement of my key observational and experimental findings based on the Survey response data as set forth in the Study Report. My detailed observational and experimental findings are set forth in the full Study Report, a complete copy of which is included with this Declaration as Exhibit 2.[8]

The Survey Results - Key Observational Findings

21. For the observational portion of the study, respondents were asked their perceptions of safety for five different types of parks: 1) parks with amenities for families and children (e.g., playground, picnic pavilions, organized activities for children); 2) parks that offer outdoor, water-based recreation for adults and children (e.g., fishing and boating); 3) parks that offer golf-related activities (golf parks); 4) parks that offer camping; 5) parks that have unpaved trails and no basic amenities such as toilets. Respondents were also asked about perceptions of safety at open-air fairs and markets, including farmers' markets, and political protests if firearms were allowed in such locales.

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[8] As noted in the Study Report, *see* Ex. 2, Study Report pp. 69-71, the results, observations, and conclusions to be drawn from the Survey are consistent with those of a nationally representative survey administered by the survey company YouGov. This portion of the Study Report's comparative analysis draws from my recent work with Duke University Professor Darrell A. H. Miller and Dr. Kaplan in the forthcoming Notre Dame Law Review article analyzing the YouGov survey results and studying the "chilling" effect of public weaponry and the related regulatory efforts to protect the peace and to prevent "the terror of the people." *See* Miller, Darrell A. H., Filindra, Alexandra and Kaplan, Noah J., *Technology, Tradition, and 'The Terror of the People'* (July 25, 2023), Notre Dame Law Review, Forthcoming, Duke Law School Public Law & Legal Theory Series No. 2023-41, Available at SSRN: https://ssrn.com/abstract=4521030 ("Terror Technology Article").

22. We analyzed the data for the overall sample and separately as to respondents who live in gun-owning households and people who live in non-gun-owning households.

Summary of Observational Findings

23. The survey results lead to several key conclusions that can be extended to the general population of the area.[9]

a. *First*, area residents' opinions are very consistent across all types of public spaces included in the survey. Analyses demonstrate that their attitudes about all locales are part of a single mental construct.[10] This means that there is no substantive difference (in terms of statistical significance) in how people respond to various questions and scenarios about the presence of guns in different types of parks and in open-air markets. Overall, people have similar attitudes when it comes to 1) guns in more highly frequented parks (e.g., parks with amenities for children) 2) less frequented parks (e.g., camping parks and remote parks), and 3) open-air markets. Therefore, the location does not significantly change how the local population approaches the presence of guns in public spaces.

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[9] Since only descriptive analyses and no direct group comparisons are discussed in the observational analyses section, no tests of statistical significance were necessary. The margin of error for each group varies by question based on the sample size (i.e., the number of people in each group who answered the specific question). *See* Ex. 2, Study Report, Survey Methodology, p. 3.

[10] A technique called factor analysis is used to determine the inter-relationships between the individual items within each battery (i.e., the different types of parks, for example when asked about whether the respondent would feel safe there if guns were allowed). The results of factor analyses performed for each question battery show that people's responses across items are very highly correlated. Furthermore, a statistical test of reliability called Cronbach's alpha confirms that these items could be reliably used as a single index because they are so highly correlated. This statistical test also demonstrates the cohesiveness in respondents' response patterns within batteries. *See id.* App. C Tables C1-C8, pp.77-80.

b. *Second*, the potential presence of guns in parks and markets induces feelings of less safety among most people in the local population (they declare that if guns were allowed in such locales, they would feel "less safe"), and may drive people to visit such spaces less frequently.

c. *Third*, two key considerations (that we measure based on the Survey) underly such feelings of heightened insecurity and hesitancy to visit these spaces if guns are allowed: 1) many people expect that crime will increase because of the presence of guns in such public spaces; 2) people fear that confrontations with others in a park or a market may escalate if guns are allowed there.

d. *Fourth*, there are differences in the strength of these attitudes between people from gun-owning households and those from non-gun-owning households, but the attitudes of both groups trend in the same direction. Specifically, very large proportions (and often almost all) of people who live in non-gun-owning households express insecurity and hesitancy when told that guns may be allowed in the specified locales. Importantly, a plurality (and often a majority) of people from gun-owning households share these views as well. The response patterns among those from gun-owning households are in the same direction as for those from non-gun-owning households but not as strong.

Specific Observational Findings

24. More specifically, the Survey results reflect the following:

a. Approximately three-fourths of Survey respondents say that they would feel "a lot less/somewhat less safe" if guns are allowed in parks or open-air markets. *See* Ex. 2, Study Report, Observational Findings, Section A, pp. 12-16.

i. Specifically, more than two-thirds would feel less safe in parks with amenities for children (72%); waterparks (72%); golf parks (69%); camping parks (69%); remote parks (69%); and open-air markets (73%).

ii. The vast majority of those in non-gun-owning households and a plurality of those in gun-owning households express the same view.

b. About three-fourths of respondents say they would feel "a lot less safe/somewhat less safe" if guns are allowed in public spaces and other people were armed in such domains. *See id.* Section B, pp. 17-21.

i. To be exact, 75% say they would feel less safe in parks with amenities for children; 74% in waterparks; 75% in golf parks; 73% in camping parks; 73% in remote parks; and 73% in open-air markets.

ii. Expectations of less safety are almost universal among participants who live in non-gun-owning households.

iii. A plurality of respondents from gun-owning households shares the same belief that they would feel less safe.

c. More than half of respondents say they would feel "a lot less safe/somewhat less safe" if guns are allowed and they themselves were the ones armed in these locales. *See id.* Section C, pp. 22-26.

i. In more specificity, 54% would feel less safe if they were armed at a park with amenities for children; 54% say they would feel less safe in a waterpark or a golf park; 52% say the same for a camping park or a remote park; and 54% would feel unsafe if they were armed at an open-air market.

ii. Between 68% and 72% of those from non-gun-owning households expect to feel less if they were the one armed at a park or market.

iii. Those from gun-owning households tend to be split: about a fourth say they would feel less safe if they were the one armed at a park or market; approximately a similar proportion say their feelings of safety would not be affected either way.

d. About two-thirds of residents say they would be "a lot/somewhat less likely" to visit a park or market if guns were allowed there. *See id.* Section D, pp. 27-31.

i. 67% say they would be unlikely to visit a park with amenities for children; 62% say the same about waterparks; 65% about golf parks; 63% about camping parks; and 65% about remote parks.

ii. Similarly, 63% say they would be unlikely to visit an open-air or farmers' market if guns were allowed there.

iii. About 8-in-10 among those from non-gun-owning households say they would be "very/somewhat unlikely" to visit the specified parks and markets if guns were allowed there.

iv. A plurality of those from gun-owning households (between 43% and 45%) also say they would be unlikely to visit these parks and markets.

e. About three-fourths of respondents who live in gun-owning households say they are "very/somewhat unlikely" to bring a gun to a park or open-air market if guns were allowed there. *See id.* Section E, pp. 32-35.

i. Specifically, 64% say they are unlikely to bring a gun to a park with amenities for children and 65% to a waterpark; 66% are unlikely to bring a gun to a golf park; 52% say they are unlikely to bring a gun to a camping park; 54% would not bring a gun to a remote park; and 65% tell us they would not bring a gun to an open-air market.

ii. A minority, between a fourth and a third, of those from gun-owning households say they would be "somewhat/very likely" to bring a gun to one of the specified public places.

f. Four-in-five respondents say they would feel "very/somewhat unsafe" in a heated argument with someone at a park or open-air market if guns were allowed there. *See id.* Section F, pp. 36-40.

i. The vast majority, 81% would feel unsafe at a park with amenities for children; 80% say the same for a waterpark, a golf park, a camping park, a remote park, or an open-air market.

ii. This perception is near universal among those from non-gun-owning households.

iii. A clear majority of those from gun-owning households express the same apprehension.

iv. Fewer than a fifth among this group say they would feel "somewhat/very safe" under such circumstances.

g. The majority of respondents believe that crime in parks and open-air markets would "increase a lot/somewhat" if guns were allowed there, while about a third believe that crime would remain the same. *See id.* Section G, pp. 41-45.

i. To be exact, 52% say crime in parks with amenities for children would increase; 54% report the same for waterparks; 50% say crime would increase at golf parks and 51% that it would increase at camping parks; 52% believe it would increase at remote parks; and 54% say it would increase at open-air markets.

ii. Among those from non-gun-owning households, about two-thirds say that crime would increase across these public locales.

iii. Those from gun-owning households are about equally split: approximately a third say crime will increase and another third that it will stay the same.

h. Three-fourths of respondents report that if guns were allowed in public places and they themselves arrived armed at such a location, other people would feel "very/somewhat unsafe." *See id.*, Section H, pp. 46-50.

i. Specifically, 77% say others would feel unsafe in parks with amenities for children; 75% say the same for waterparks; 73% believe so for golf parks; 71% say others would feel unsafe at camping parks; 72% report the same sentiment for remote parks; and 75% say so about open-air markets.

ii. The vast majority of those from non-gun-owning households believe that others would feel unsafe if they, themselves, arrived armed at a public place such as those specified.

iii. Between two-thirds and half of those from gun-owning households agree that others would feel unsafe if they, themselves, were armed at a public park or market.

The Survey Results - Key Experimental Findings

Summary of Experimental Findings

25. In addition to observational items, the study included survey experiments the purpose of which was to determine whether and to what degree mention of "guns being allowed" in specified public spaces produces "chilling effects," that is increased hesitancy to utilize such public spaces and stronger beliefs that these public spaces would be less safe. Experiments validate and strengthen the results of observational analyses because they provide causal evidence.[11]

26. The Survey asked a series of four survey experiments meant to determine whether the presence of guns in specific locations (i.e., public parks, markets, and political protests) may produce "chilling effects." By "chilling effects," we mean a decline in the utilization of these resources. We measure "chilling effects" attitudinally, but because there is a correspondence between attitudes and actual behavior(Saris & Sniderman, 2004), we can extrapolate from people's attitudes to how they would behave under similar circumstances.

27. For each experiment, respondents were randomly assigned to either a "treatment group" which was asked about utilization "if people were allowed to carry guns in public places" or a "control" (a/k/a "placebo") group which did not see a mention of guns. The only difference in the question wording was the phrase that mentioned guns.[12]

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[11] For an explainer of survey experiments, see Exhibit 2, Study Report, Experimental Methods Explainer, pp. 4-6.

[12] For the exact wording of the questions included in the experiments, see Exhibit 2, Study Report, Experimental Analysis Table EX, p. 51. For the detailed results from the four experiments, see Exhibit 2, Study Report, Experimental Analysis, pp. 51-68.

28. All four experiments produced "chilling effects." These effects were very large in the experiments that referenced parks for children and open-air markets. Chilling effects were also sizeable in the two experiments that referenced political protests.

29. The chilling effects were especially large among those in non-gun-owning households. Among those from gun-owning households, we identified statistically significant chilling effects in the experiment referencing open-air markets (at conventional levels of statistical significance) and in the one referencing public parks (significant at conventional levels only in one-tailed analysis).[13] In the two experiments referencing protests, we report null results (no statistically significant difference between the control and experiment groups) for those from gun-owning households.

30. Analyses from a forthcoming journal article using national data which are reproduced in the Study Report provides very similar experimental results. *See* Ex. 2, Study Report, Analyses with National Data, pp. 69-70; Ex. 3, Terror Technology Article, pp.20-30 Specifically, these analyses show statistically significant results consistent with chilling effects for all three groups (i.e., total population, non-gun-owning households, and gun-owning households) in the first two experiments (likelihood of recommending a local park to a friend with children; safety of open-air markets). For the additional two experiments that related to political protests, we observe statistically significant chilling effects for the overall population and among those from non-gun-owning households. Among those from gun-owning households,

[13] For the meaning of "one-tailed testing" in this context, see Exhibit 2, Study Report, footnote 6.

the direction of the effect is consistent with expectations (a decline from control to treatment), but this difference is not statistically significant.

Summary of Experimental Findings

The survey experiments produced the following specific results:

Experiment 1: Guns in Parks

31. The first experiment shows that area residents are less likely to recommend to a friend with children to visit a local park in Fairfax County if guns were allowed there. *See* Ex. 2, Study Report, Experiment 1, pp. 52-56). This difference is statistically significant at conventional levels ($p<0.05$). This means that the probability that this finding is the result of chance is less than 5%.[14] The data show a "chilling effect" of 53-percentage points.

32. The difference is very large and statistically significant among those from non-gun-owning households ($p<0.05$).

33. Among those from gun-owning households, the relationship is directionally the same, but the difference is significant only at $p<0.10$ ($p<0.05$, one-tailed). This means that the probability that that this finding is the result of chance is less than 10%.

Experiment 2: Guns in Open-Air Markets

34. The second experiment shows that area residents are statistically significantly less likely to think that going shopping at a Fairfax County open-air or farmers' market is safe if guns were allowed there ($p<0.05$) (*See id.* Experiment 2, pp. 57-60). This means that the probability

[14] For more details on statistical significance, see Exhibit 2, Study Report, Statistical Significance, p. 4.

that this finding is the result of chance is less than 5%. The data indicate that the mention of guns produces a 64-percentage points.

35. The difference is especially large among those in non-gun-owning households ($p<0.05$).

36. Among those from gun-owning households, the difference between the control and treatment conditions is also statistically significant at conventional levels ($p<0.05$).

Experiment 3: Recommending Attending a Protest

37. The third experiment shows that people are less likely to recommend to a friend to attend a protest in Fairfax County if guns are allowed in public spaces ($p<0.05$) (*See id.* Experiment 3, pp. 61-64). There is a 33-percentage point "chilling effect" in this scenario.

38. Among those in non-gun-owning households, there is a large and statistically significant difference in the likelihood to recommend to a friend to attend a protest between the control and treatment conditions ($p<0.05$).

39. The direction of the effect is the same for those from gun-owning households, but the relationship is not statistically significant.

Experiment 4: Recommending Carrying Sign at a Protest

40. The final experiment shows that people are less likely to recommend to a friend to bring a sign to a protest in Fairfax County if guns are allowed in public spaces. *See id.* Experiment 4, pp. 65-68. The difference between the control and treatment conditions is statistically significant ($p<0.05$). There is a "chilling effect" of 15-percentage points.

41. Among those in non-gun-owning households, we observe a statistically significant difference between the control and treatment conditions ($p<0.05$).

42. There is no statistically significant difference between the control and treatment conditions when it comes to those from gun-owning households.

* * * *

43. This Declaration is presented in a form that is much different from academic writings. It reflects an accurate recounting of my research and conclusions regarding the subject matter discussed. However, given the time constraints at issue in this case, as well as the fact it was prepared in connection with a pending lawsuit, it is not drafted at the level of depth that would be expected for academic writing. I reserve the opportunity to supplement this declaration to reflect any additional research or context that may be necessary as this case proceeds.

Pursuant to 28 U.S.C. § 1746, I, Alexandra Filindra, state under penalty of perjury that the foregoing declaration is true and accurate to the best of my knowledge, information, and belief.

Executed: January 4, 2024

Alexandra Filindra, Ph.D.